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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/589,339

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David B. Jackson

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02/07/2008

NOVAK DRUCE + QUIGG LLP  
10415 SOUTHERN MARYLAND BLVD.  
DUNKIRK, MD 20754

EXAMINER

TO, JENNIFER N

ART UNIT

PAPER NUMBER

2195

MAIL DATE

DELIVERY MODE

02/07/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

mn

<b>Office Action Summary</b>	<b>Application No.</b> 10/589,339	<b>Applicant(s)</b> JACKSON, DAVID B.	
	<b>Examiner</b> Jennifer N. To	<b>Art Unit</b> 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                             |                                                                                         |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. Claims 1-18 are presenting for examination.

#### ***Claim Rejections - 35 USC § 101***

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-18 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. The language of claims 1-18 raise a question as to whether the claim is directed merely to an abstract idea that is not result in a practical application producing a useful, concrete, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. For example, the claims limitation recited the matter of determining availability of compute resources, determining data requirement for processing the job, and determining a co-allocation in time reservation. However, there is nowhere in the claims that shown the concrete and tangible result of such determining steps.

Therefore they are not produced any tangible result to form a basic statutory subject matter under 35 U.S.C. 101 for a practical application. The following link on the World Wide Web is for the United States Patent Trademark Office (USPTO) policy on 35 U.S.C. 101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

5. Claims 7-12 are rejected under 35 U.S.C. 101 because the claimed invention are directed to system claim, but appearing to be comprised of software alone without claiming associated computer hardware required for execution (i.e. a system claimed that contained only software modules is a software system). The following link on the World Wide Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101\\_20051026.pdf](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

***Claim Rejections - 35 USC § 112***

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lacks antecedent basis:

- i. the first step – claims 5, 11, 17;
- ii. the start ranges -- claims 5, 11, 17;
- iii. the offset – claims 5, 11, 17;
- iv. the combination start range – claims 5, 11, 17;
- v. the negative by the offset – claims 5, 11, 17;
- vi. the resulting information – claims 5, 11, 17;
- vii. the final list – claims 5, 11, 17;

viii. the appropriate start time – claims 5, 11, 17.

b. The claim language in the following claims is not clearly understood:

i. as per claim 1, lines 3-4, it is not clearly understood what is meant by “determining availability of compute resources including availability timeframes to process the submitted job” (i.e. “determining availability of compute resources including availability timeframes of the compute resources to process the submitted job”).

ii. as per claim 3, line 3, it is not uncertain what "you" referred to (i.e. the reader, the system user, the system itself).

iii. as per claim 5, line 7, it is not clearly understood what is meant by “requesting another resource” (i.e. who request another resource, the same submitted job or another job). Line 7, it is not clearly understood what is meant by “requesting another resource and returning to step (2)” (i.e. when the system reach to step (4), it keep loop back to step (2) and not end, when will steps (6)-(8) will be performed). Line 15, it is not clearly understood what is meant by “reserving he resources for the appropriate start time” (i.e. reserving the resources for the appropriate start time).

iv. as per claims 7-18 having the same deficiencies as claims 1-6.

Appropriate corrections are required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Rottoo (WO 98/58518).

4. As per claim 1, Rottoo teaches the invention as claim including a method of performing intelligent data pre-staging for a job submitted to a compute environment (abstract), the method comprising:

determining availability of compute resources including availability timeframes to process the submitted job (abstract, lines 21-30);

determining data requirements for processing the job (page 2, lines 14-20, page 6, lines 13-17, Rottoo inherently teaches this limitation because based on page 2, and 6, as cited, Rottoo teaches that based on the query request (the query requested indicated the data requirements), the system creating the availability list, thus Rottoo have to determine the data requirement in order to generate said list); and

determining a co-allocation in time reservation (page 10, lines 29-31).

5. As per claim 2, Rotto teaches that wherein the data requirements relate to a quantity of data and a speed of migration of the data to the compute resources (page 2, lines 14-20).

6. As per claim 3, Rotttoo teaches that wherein the data requirement for processing the job are at least one of: network information, network speed, faults, statistical fluctuation, delivered bandwidth by the network, size, and any issues, you basically have to ramp up the initialize step, a data transfer step, and a prologue step, a termination step which completes the record and verifies the successful transfer of data (page 2, lines 14-20).

7. As per claim 4, Rotttoo teaches that wherein the compute resources must be available prior to the completion of the data staging step (abstract; page 5, lines 23-26; page 6, lines 13-17).

8. As per claim 5, Rotto teaches that wherein determining the co-allocation in time reservation further comprises: (1) requesting the resources for the first step in the job process (user submitted the query); (2) calculating existing resource guarantees and reservations already in place to create an availability range list (page 6, lines 18-25); (3) converting the availability range list into a start range list (page 6, line 25 through page 7, line 2); (4) requesting another resource and returning to step (2) (page 10, lines 29-31). (5) shifting the start ranges by the offset and performing an intersection operation

on the combination start range (page 10, line 10 through page 12, line 3); (6) shifting it back by the negative of the offset the resulting information provides when to start each reservation (page 10, line 10 through page 12, line 3); (7) presenting the final list of possible starting times for a reservation to a user for selection (page 12, lines 3-6); and (8) upon receiving a user selection of a reservation start time, shifting everything back and reserving the resources for the appropriate start time (page 12, lines 1-8).

9. As per claim 6, Rottloo teaches wherein the range list indicates all the availability time frames (page 6, lines 15-17).

10. As per claims 7-12, they are system claims corresponding to method claims 1-6. Therefore, they are rejected for the same reason as claims 1-6 above.

11. As per claims 13-18, they are medium claims corresponding to method claims 1-6. Therefore, they are rejected for the same reason as claims 1-6 above.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO892 form).




13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer N. To whose telephone number is (571) 272-7212. The examiner can normally be reached on M-T 6AM- 3:30 PM, F 6AM- 2:30 PM.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

15. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jennifer N. To  
Examiner  
Art Unit 2195

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LEWIS A. BULLOCK, JR.  
PRIMARY EXAMINER

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10/589,339  
Art Unit: 2195

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